Exhibit OMR1

UNITED STATES OF AMERICA
UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
WESTERN DIVISION

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HONORABLE MARIANA R. PFAELZER,
UNITED STATES DISTRICT JUDGE PRESIDING

- - -

NEUROGRAFIX, PLAINTIFF,	CERTIFIED COPY
VS.	CV 10-01990 MRP
SIEMENS MEDICAL SOLUTIONS USA INC., et al., DEFENDANTS.	

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REPORTER'S TRANSCRIPT OF PROCEEDINGS
THURSDAY, MARCH 24, 2011
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a magnitude.

And all within the section of vector processing, there's a reference to using tensor math, which explains that it's not saying it's a tensor. It's just saying alternative forms of vector analysis can be applied.

This is at Column 21.

And it says: Similarly tensor analysis employing tensors of various rank can be used to treat or transform the coordinates of MR diffusional anisotropy.

All it's saying is that you can use different methods to create a vector to determine the direction and magnitude. And it's not just saying do math. It's saying determine the vector. Resolve this data into a vector which has a magnitude and a direction and it's not limited to the particular equations disclosed.

THE COURT: Go on.

MR. FENSTER: Your Honor, we're now done with the non means-plus-function terms.

With the Court's permission, I'll turn it over to my partner Alex Giza to argue those terms.

MR. GIZA: Good afternoon, Your Honor. Alex Giza, Russ August & Kabat, representing the plaintiff

NeuroGrafix.

Your Honor, I'm going to address the means-plus-function claim, that's Claims 54, 64, 55, 68 -- 58, 61. I'll also be addressing the claims which defendants argue are step-plus-function. But first, let's dive to the means-plus-function claim.

THE COURT: Ones that we can all agree are means-plus-function.

MR. GIZA: Yes, Your Honor, there's those five. So the good news is there is some agreement on the means-plus-function claim. There are two general issues. First, on the areas of agreement.

We put up Slide 59.

The parties are generally agreed as to the functions, the recited functions for the means-plus-function limitations. So there's no substantive dispute there.

There's also some agreement as to the corresponding structure, whether it is or includes this particular corresponding structure. The parties have agreed that the corresponding structure for the means-plus-function claim at least includes computer 72. It's shown here in Figure 8.

Front-end circuit --

THE COURT: Wait, wait. Go on.

MR. GIZA: The parties agree that the corresponding structure to the means-plus-function claims includes computer 72, front-end circuit 74.

Those are both shown here in some detail in Figure 8.

THE COURT: Yes.

MR. GIZA: It also includes, according to the parties' agreement, on Slide 60, host processing system 32. And right next to Figure 6, there is the language in the specification that describes the host processing system as structure in place of the separate processing system.

So that's the where the parties agree.

In general, there's two issues that we need to address today regarding claim construction 4, the means-plus-function claim.

First, whether an algorithm is required in addition to the agreed structure. And second, if an algorithm is required is the algorithm disclosed, and if it is disclosed, what exactly are the contours of that algorithm.

A little more precisely, the question is: Would a person having ordinary skill in the art understand the Filler patent to disclose an algorithm that is clearly linked to the recited function?

THE COURT: Yes, in general that's a correct question.

MR. GIZA: Okay. One point I want to raise right from the beginning is the parties' agreement as to what one of ordinary skill in the art is.

Now, I'm not saying that we have full agreement. There is some dispute as to whether it is required for one of ordinary skill in the art to have a medical degree.

NeuroGrafix believes that it is required. Defendants believe that it could be a qualification but is not be necessary to be a qualification.

Putting that aside, there is no dispute between the parties that one of ordinary skill in the art in this case is a highly educated and experienced individual. Both sides propose a level of ordinary skill in the art that includes at least six years of postgraduate education. In many cases, a bachelor's degree in engineering or computer science is the level of ordinary level skill.

Not here. Here we're talking about an M.D. plus a residency plus experience. From the defendants' side, they're talking about a Ph.D. level of ordinary skill in the art. This is a highly educated person, and we must make this analysis through that lens.

THE COURT: Go on.

MR. GIZA: So let's address the first issue, whether an algorithm is required. There are two cases that will focus the argument for us. On the one hand, we have the Dossel case. On the other hand, we have Aristocrat. And I'm sure that you're familiar with these cases. They're both prominent patent cases. They have been briefed extensively here.

There are two ways to reconcile these cases.

THE COURT: Why don't you do it. I would like to hear you do it.

MR. GIZA: Good. Either way, Your Honor, no matter which way we reconcile it, these claims, the claims in the Filler patent are not indefinite. That much is certain.

Let's talk about Dossel and Aristocrat. First off regarding Dossel, the relevant facts are these: The issue is whether means-plus-function language, claim language, was indefinite in Dossel because Dossel did not recite a computer as structure, did not have the word "computer" in the specification. There was no algorithm, according to the Court. All there was a reference to a -- to known algorithm, specifically the word known algorithm.

Aristocrat is on the other side.

Aristocrat, there is disclosure of a computer with appropriate programming. And appropriate programming is exactly the language that's in the specification there.

In the Aristocrat patent there was no algorithm or even a reference to known algorithm.

So the outcome in Dossel was that the claim language was not indefinite. The outcome in Aristocrat was that the claim language was indefinite.

So how do we reconcile these two cases?

One way in Dossel, Dossel's application disclosed that the algorithms were known. Aristocrat did not have this disclosure. Referred only to a computer with appropriate programming. Did not indicate that there was some known way of doing it, just that potentially there could be. And the Court called them out on this and said, All you can argue in Aristocrat is that devising an algorithm to perform the claim function would be within the capability of one of skill in the art.

So one way to reconcile these two cases is, on the one hand, if you refer to known algorithm, that could be sufficient. But arguing that one of ordinary skill in the art could device an appropriate algorithm is not. That's one way to look at it.

Another way to reconcile these two cases.

If we look at Dossel, although the Court says there was no disclosure of an algorithm, if we interpret Dossel to have actually disclosed some corresponding algorithm and maybe there is some definitional issue regarding algorithm, how the Dossel court understood or used the term algorithm, there certainly was some disclosure in the specification about how the computation, how the processing was supposed to be done.

If we understand that to be some sort of corresponding algorithm, then Dossel and Aristocrat can be reconciled such that Dossel stands for the proposition that disclosure of basic mathematical technique that would not be known -- that would be known, pardon me, to any person of skill in the pertinent art is not required if you have corresponding additional disclosure that rounds out the rest of the algorithm that you need to implement the claim means-plus-function processing function.

So we have two ways of potentially reconciling Dossel and Aristocrat. If we go with the first way, Dossel and Aristocrat stand for the proposition that allows reference to known algorithms and thus does not require an algorithm as corresponding structure, then for this case no further analysis is needed.

We have disclosure of corresponding structure in this case, agreed structure, computer front-end circuit postprocessing system. However, if Dossel and Aristocrat do require an algorithm in addition to a computer, then we must analyze each disputed claim individually, and this is where we get into the subtlety that you talked about. There is some detail involved in this case, and we will delve into that level.

In any event, Dossel stands at least for the proposition that a reference to known algorithms as part of additional relevant disclosure is sufficient to meet the requirements of means-plus-function claiming.

MR. LOCASCIO: Your Honor, I certainly don't want to interrupt, but this one may seem like we -- I think they've concluded -- talking about the law, and now we're going into each of them?

I would suggest -- and certainly, we'll sit down if Your Honor would like. But I think I can respond on the broader legal issues that separate us here, and then we can go down to the sections below.

But I just think that would be a logical way to address this. We talked a fair amount about the law.

THE COURT: Is that all right?

MR. GIZA: That's fine, Your Honor.

You would like that?

THE COURT: Well, you can do it whichever way you want. I think I do know what the law is.

MR. GIZA: Okay.

THE COURT: And I do know which way it's going and how the most recent cases have gone. So we can move along.

MR. GIZA: Okay. So with your leave, Your Honor, can we delve into Claim 54, which is the first means-plus-function claim, and I'll describe for you how the algorithm is disclosed.

THE COURT: Do that.

MR. GIZA: Let's go to Slide 62.

The first disputed means-plus-function limitation is Claim 54-C, and it is a process through means coupled to citation and output arrangement means for processing to outputs to generate data representative of the diffusion and anisotropy of the selected structure.

This is a good claim limitation to start with because the difference between the parties is rather small.

As I mentioned earlier, the parties agree as to the function, the recited function, and that is processing said outputs to generate data representative

of the diffusion anisotropy of the selected structure.

With regard to corresponding structure, both NeuroGrafix and the defendants, as I mentioned earlier, agree that computer 72, front-end circuit 74, and host processing system 32 and their equivalents are all corresponding structure. Those are clearly linked to the recited function.

In terms of the algorithm, NeuroGrafix believes that the appropriate algorithm is blocks 112 through 148 of Figures 9 and 10, and appropriate equivalent. Defendants believe that the corresponding structure is blocks 112 through 154 from Figures 9 and 10 and equivalent.

So the only difference, Your Honor, between the two parties on this particular claim term is the corresponding structure of blocks 150 through 154 in Claim 10.

Let's go on to Slide 63.

Here are Figures 9 and 10.

The portions that are boxed in red, the parties agree that's all corresponding structure to this claim limitation. It all is clearly linked with the recited function. And this is fairly clear, if you look starting with box 122, the box has ROI in there. That stands for region of interest. That relates to the

selected structure, which is the last prepositional phase in this claim limitation.

The next box, 124, average intensity, that's a computation of the average intensity. That is part of the processing required by this claim.

The next box, 126, says linear regression. That is a linear regression processing.

And 128, compute D and T2. Again, another step regarding the processing in this claim. It says compute D, capital D. D stands for diffusion coefficient, and that's expressly stated at Column 15, line 27. It's also stated at Column 18, line 27.

So clearly, this structure, this corresponding structure, at least this part is corresponding structure to Claim 54C, and it's clearly linked to that claim language, that function.

The dispute between the parties -- we'll move on to Slide 64. The dispute between the parties focuses on blocks 150, 152 and 154. We believe it's not be necessary for this claim limitation. Defendants believe that it is. Particularly in step 128, the variable D, as I mentioned, is data representative of diffusion anisotropy. And I've mentioned those two portions in the specification where it describes that.

And I'll put it up for you.

We're looking at Column 15 and line 27. You can see it says: Finally, the value of the apparent T2 relaxation time for the apparent diffusion coefficient D, if diffusional weighting is employed, is computed for particular ROI at block 128.

So once we get to block 128, Your Honor, we have data representative of diffusion anisotropy. And that's what Claim 54C is computing.

Blocks 150 through 154 are additional processing, the additional processing for display, as is clear from block 154, which expressly says display.

Claim 54C does not require display, just processing the data representative of diffusion anisotropy.

Accordingly, the appropriate corresponding structure for Claim 54C, if an algorithm is necessary, is blocks 112 through 148 of Figures 9 and 10 and their equivalent.

Unless you have any questions, Your Honor, I will --

THE COURT: No, I don't.

Let's just be sure of something. The blocks that we are talking about were all known and described in the art, yes?

MR. GIZA: I'm not sure that's true, Your

Honor.

THE COURT: Well, I'm asking you. Does the invention include portions of -- at least the novelty of this invention include the novelty of these blocks, no?

MR. GIZA: Your Honor, that goes a little bit beyond the claim construction question here, and I'm not -- I can't speak with certainty as to that point.

THE COURT: All right. But everybody would know about it.

MR. GIZA: These steps, most of these steps are, you know, looking at compute D or -- and T2.

Right. So one of ordinary skill in the art, as the parties have agreed, would have an understanding of what to do in that situation.

THE COURT: Yes. All right.

MR. LOCASCIO: Your Honor, let me first address the law.

Mr. Giza suggests two ways to -- his words -- harmonize Dossel and Aristocrat. The Federal Circuit has done this for us, Your Honor. We don't have to try to guess.

THE COURT: They did do it.

MR. LOCASCIO: Aristocrat itself says it. Aristocrat specifically discusses Dossel. For the last 14 years people have been trying to rely on Dossel to

say, You don't need an algorithm. And I think ten times the Federal Circuit has issued a decision published that says: Dossel doesn't mean you don't need an algorithm, period. And they have made that abundantly clear.

THE COURT: Well, they are certainly coming down with more than one decision indicating that.

MR. LOCASCIO: WMS Gaming. Harris vs. Erickson. I've got a list on them, Slide 101.

A specific algorithm needs to be included for construction.

Now, how the Dossel and Aristocrat distinction, as the plaintiff suggests, came to pass is interesting. Dossel is not a District Court case, as it was suggested, that comes up on claim construction. Dossel is a PTO rejection that makes its way to the Federal Circuit.

And so the question there is never one of claim construction. So is the claim limited to a particular structure as disclosed in the spec is never the question before the PTO in Dossel.

The question is, is there enough in the spec for the claim to issue, not what will its scope be if it does issue. And that's an important difference.

What ultimately Aristocrat says, specifically with respect to the Dossel: From the

context and reviewing the application -- this is Aristocrat at 1336 -- it's clear Dossel, the Dossel court used algorithm in a narrow sense, referring to a particularly well-known mathematic operation could be used to solve the equations disclosed in the application.

Aristocrat in this case on appeal was arguing what NeuroGrafix argues now, namely that reference to a general purpose computer with appropriate programming discloses enough under 1126.

And the court rejects that and says Dossel doesn't get you there. And if you ever actually pull up, as we have here, the Dossel spec, you understand exactly why this is the case.

This is the specification in Dossel. Dossel is 57885215. And I can't even get -- I can get it all on the screen, just barely. This is the algorithm, a single algorithm disclosed in Dossel.

Line 6 through line 55 of Column 4 in Dossel is what the Court ultimately determined is a sufficient disclosure under 1126 to not have -- to overcome the rejection for indefiniteness.

Now, if one was to construe Dossel using 1126 language in the claims as it does, that algorithm would be the entirety of the scope of Dossel's patent

protection plus statutory equivalence under 1126.

Dossel is not inconsistent when you look at the actual disclosure and what was happening when that case went to the Federal Circuit.

THE COURT: By the way, in reading these cases, which I do every time they come out, I always wonder what the equivalent would be.

MR. LOCASCIO: Statutory equivalent.

THE COURT: Yes.

MR. LOCASCIO: That is a discussion that I expect if we ever get there will be another day of the difference -- I have tried to explain it to people, people explained it to me, the difference between statutory equivalence and doctrine equivalence. The time of analysis is the core difference between the two.

THE COURT: Actually, I think you are right.

MR. LOCASCIO: Thank you. Dossel does not get them where they want to be, Your Honor. And the first proposed suggestion that it's -- if you use the word known versus unknown, that that's somehow a distinction doesn't get you there.

Biomedino, Federal Circuit 2007, quote, a bare statement that known techniques or methods can be used does not disclose structure.

1126 requires structure. It doesn't just

it's say known to someone in the art. You would getting around the entirely of means-plus-function claiming if all you had to do was say people know how to do it.

And so the law and how it impacts this set of claims we're going to look at, Your Honor, is simple. All of these claims talk about a processor. It is undisputed that the structure disclosed in the specification for that is limited to a general purpose computer.

This falls in that line of a decade of Federal Circuit law on that issue. It is undisputed that computers require software to perform their functions to specification, and the witnesses here acknowledge that. So ultimately the question is what algorithm is disclosed.

Aristocrat, Harris and a host of other cases saying if you're going to use a computer-implemented means-plus-function language processing, as the case is here, a processor means, it is limited to the algorithm disclosed in the specification. There needs to be one. And if there is not an algorithm, the claim itself is indefinite. If there is an algorithm, the proper construction is limited to that algorithm. And if there are two algorithms, certainly, Your Honor, you would be limited to two.

We don't have that situation here. For some we have agreed there is one. We have a little bit of peripheral disagreement as to scope, which I'll address in a second.

But the proper construction, while the plaintiff suggests otherwise, is to include that language in the construction. And that's what The court did in Harris.

We've addressed Dossel. We don't need to talk about that anymore.

54 processor means, what we just heard Mr. Giza talk about, I want to walk through that briefly. Because as Your Honor recognizes, we're really disagreeing about three boxes on a flow chart. And we're actually only disagreeing about two, because we suggest it goes only through 152.

And as I think Mr. Fenster did on one point, we looked back and said we've included 154. That's the display point Mr. Giza made. That does not need to be there. So we're now -- we've solved 33 percent of our flow chart debate.

We now have two boxes left, whether 150 and 152 need to be included or not. And quite simply, Your Honor, they do. And the reason why is if you actually look at -- there were two passages Mr. Giza pointed to

as talking about the diffusion variable D.

And the second one that he didn't put on the screen is Column 18, lines 26 to 30, and they were cited on the slide as to the place to look for this issue. And I read it, and here's what it says:

If the axis of anisotropy is unknown, the various diffusional coefficients D computed for each region of interest using different gradient orientations are compared at block 150 to identify the maximum and minimum values.

Part of the paragraph I didn't highlight after that goes on to say by doing that you get the magnitude of diffusional anisotropy at the point while the anisotropic direction is indicated by the gradient orientation.

So the data, Your Honor, that is the function here, is to be clear, we are trying to find out data representative of anisotropic diffusion.

The reference that the plaintiffs themselves point to on Column 18 says you need block 150 to do that. And the intro is that the axis of anisotropy is unknown, that means if you don't know exactly the path the nerve is in. And as you will recall from some of the early discussion, and if you look back at the specification, including Column 19, line 55 and other

places, what is alleged to be novel here and a big part of the invention is these nerves follow complex paths, meaning you don't know what the direction of anisotropy, namely the direction the nerve is going at that point is. And so the language here in Column 18 saying that the axis of anisotropy is unknown, that's a big part of what they're saying to do here. And you need block 150 to do it.

You also need block 152. And Column 15 speaks to that because your discrimination of water diffusion and anisotropy is then achieved by subtracting the suppressed imagine from the enhanced image. And that's block 152.

So we agree 154 shouldn't be in there. But ultimately blocks 150 and 152 are required.

And with that, I will pass it back for the next means-plus-function language, unless Your Honor has a question.

THE COURT: No.

MR. GIZA: Your Honor, I want to address two quick points about Dossel and one point about Claim 154 C.

First off, defendants would like us to put aside Dossel because it is actually is instructive to us for reasons other whether an algorithm is required or

not. Dossel, if nothing else, stands for the proposition that a disclosure, including a disclosure that there are known algorithms, can be sufficient corresponding structure for a means-plus-function limitation regarding a computer or a processor, and we have that situation here in some fashion that's helpful to us.

Another reason that Dossel is interesting for us here is that Dossel is regarding the medical imaging field. Dossel says at 115 F.3d 947, to bolster this result we note that in the medical imaging field, it is well within the realm of common experience that computers are used to generate images for display by mathematically processing digital input.

The Dossel patent was dealing with matrix inversion math similar to the vector tensor math analysis called out in the Filler patent.

Now, a quick point on Claim 54C.

This is Column 18, line 27 is what I would like to direct your attention to, Your Honor.

This is the point in the specification that opposing counsel put up and said that, oh, look. It indicates that block 150 is actually required to complete the claim language for 54C.

54 C requires processing the outputs to

generate data representative of the diffusion anisotropy of the selected structure.

What it says at Column 18 refers to block 150, and it says once computer 72 determined that block 130 that images have been collected for all desired diffusional gradient, operations proceed to block 150. If the axis of anisotropy is unknown, the various diffusional gradient D computed for each RLI, using different gradient orientation are compared at block 150 to identify the maximum minimum value.

The diffusional coefficient D have already been computed. You already have data representative of the diffusional anisotropy at that point.

The reason this becomes important, Your Honor, is in the next limitation we're going to talk about, Claim 64, block 152 is appropriate corresponding structure; it is part of the algorithm for that language.

So let's move on.

For Claim 64, the limitation is that it's a dependent claim. It's dependent going back to Claim 54. That's why we're doing it in this order.

The limitation is wherein said process or means is further for processing, said data representative of the diffusion anisotropy of the

selected structure to produce a dataset that describes the shape and position of the selected structure.

So, again, we agree on the function, that is, processing said data representative of the diffusion anisotropy of the selected structure to produce a dataset that describes the shape and position of the selected structure.

We agree that the corresponding structure includes computer 72, front-end circuit 74, host processing system 32 in equivalent. And we agree that the algorithm includes -- move on to Slide 66.

We agree that the algorithm includes the language at Column 19, 4 through 7, for example, the output of the substraction process can be divided up by the signal information from a fat suppressed T2-weighted spin-echo sequence using the aforementioned chest technique.

So the dispute between the parties is whether block 152 should be included as corresponding structure for Claim 64.

On Slide 67, we explain a little further.

Block 152 is further processing from Claim 54. The defendants have already identified blocks 152 as appropriate algorithm for the underlying Claim 54. It's not be necessary for Claim 54; it is appropriate

for Claim 64. Here it is also clearly linked to the shape and position requirement of Claim 64.

Let's go on to Slide 68.

I spoke a little bit too soon, Your Honor. There are some additional portions of the specification that are also additional corresponding structure. They disclose additional corresponding algorithms.

So one place is at Column 18, lines 35 through 65. This is describing subtraction neurography. It says when these two penultimate images are then mathematically or photographically or optically subtracted from one another, a subtraction neurogram is produced.

At Column 18, lines 53 through 55, it explains that this is known for blood vessels, and it's a called a subtraction angiogram there. It is also expressly linked to block 152.

Let me put that up.

Here's the portion of the specification that we were just discussing, Your Honor.

Column 18, lines 35 -- I don't have it all on the page, because otherwise we won't be able to read it. But it's lines 35 through 65.

And you can see at the very top, it says in the preferred embodiment, the images associated with the

maximum minimum value of the diffusion coefficient particular ROI are then used in a subtraction process, as indicated at block 152.

So this text is clearly linked to block 152; block 152 is linked to the process of generating an image for display. The image for display would show the shape and position of the selected structure.

There's additional disclosure of corresponding algorithms: Column 18, lines 67 through 19, line 2. It says, for example, in some applications of known anisotropy, subtraction is unnecessary and can be foregone in favor of a thresholding analysis -- a threshold analysis.

So here, Your Honor, we have an alternative to the subtraction neurography that we just spoke about. We have a thresholding algorithm. This is too is clearly linked because it's described specifically as an alternative to subtraction. We have even more.

Next line, please.

We have a connected voxel with thresholding algorithm. This is related to the thresholding statement we just saw, but this is at Column 21, lines 55 through 59.

At Column 29, lines 55 through 59, it says comparing pixel intensity. And it's comparing the pixel

intensity to image-dependent threshold level. That's the first step.

The second step in this algorithm is linking or projecting the results in a two-dimensional analysis to form a three-dimensional shape, the shape and position of the nerve.

The development -- the formation of a 3-D shape, that's clearly linking the forming of a three-dimensional image described here with the generation of data describing the shape and position of a nerve required by Claim 64.

Immediately following that there is a disclosure of a maximum anisotropy connection algorithm. That's Column 21, line 60 through Column 22, line 5. And there it describes a couple of steps. It determines the direction of maximum anisotropy at each voxel, and then it uses known voxel connection routines such as the one described in Saloner. And it is described as an alternative to the algorithms above; so it is also clearly linked to generating the shape and position of the nerve.

On Slide 71, we have two more examples. We have a disclosure of a three-dimensional imaging technique at Column 22, lines 6 through 17.

I'll put that up.

This paragraph describes another algorithm, a three-dimensional imaging technique. The first step, it tells one of ordinary skill in the art to use known three-dimensional imaging sequences such as those described in the Frahm article.

Then it says use four-dimensional analysis. That's down at line 12. The output of this sequence is then processed using a three-dimensional Fourier transform.

And finally, it says you can use the algorithm in Figures 9 and 10 for additional processing. It says the resultant processing used to compute D.

And as you recall from Figure 10, D is the diffusion coefficient. That's a reference to the algorithm in Figures 9 and 10. This is expressly linked because it's given as an alternative.

In the first line, line 6. This is Column 22. As an alternative to the two-dimensional imaging sequences described above, what was described above is all the other algorithms that we just spoke about.

The final example of corresponding algorithms that are disclosed regarding Claim 64 is at Column 22, lines 18 through 27, where it says that -- it says that the, more particularly, once the given nerve has been identified -- sorry, Your Honor.

Go to the top of that paragraph, line 18.

Regardless of the routine employed -- so this is supplemental to all the algorithms that we already spoke about -- the system 10 may be further programed to implement the projection by referring to known characteristics of the structure.

Known characteristics of the structure, what is that? Down below, it talks about, more particularly, once a given nerve has been identified in a given two-dimensional image, the expert system 10 is able to predict the occurrence of certain branches and mergers in this structure. So, for example, branches and mergers within a particular nerve or neural tract.

All of these portions of the specification are disclosing different algorithms, different ways of processing the data representative --

THE COURT: These are all known, though. This is all known in the art, yes?

MR. GIZA: These are all described in the patent, Your Honor, yes.

THE COURT: No, I'm asking. The inventor of this patent did not invent those algorithms?

MR. GIZA: I think in general you're correct, Your Honor. There's a reference to a Frahm article. So that certainly was in the prior art.

THE COURT: Let's be clear about this, the inventor here was not the person who devised these algorithms?

MR. GIZA: Yes, I believe that's correct, Your Honor.

THE COURT: Yes.

MR. GIZA: Okay. So all of these various portions of the specification are algorithms --

THE COURT: That were known in the art?

To one skilled in the art?

MR. GIZA: I believe that's correct, Your Honor.

THE COURT: Yes.

MR. GIZA: So the appropriate corresponding structure for Claim 64 is the algorithms described in block 152 of Figure 10; the algorithms in the specification at Column 18, line 35 through Column 19, line 7; and at Column 20, line 25 through Column 22, line 18 and equivalents.

If there are no questions, Your Honor, I will turn it over.

THE COURT: No, there are none.

MR. LOCASCIO: Your Honor, the parties agree that -- one second. Let me back up a step here.

From 64, that a certain portion of the

specification is disclosed and it does disclose an algorithm.

The plaintiffs want more in their claim. They want all these other passages to be part of the disclosed structure, which under 1126 the claim is limited to.

It's difficult, I would -- at least on my side of the room, it's difficult to keep track of all these passages that the plaintiffs say disclose enough structure or algorithms as is required to do this.

We had an exhibit that we provided the Court -- what's the exhibit number? 7? 37?

37, that took the patent spec and put red boxes all over it and give these passage numbers, because at some point it was the only way we could keep track of what they were pointing to.

THE COURT: There are a lot of them.

MR. LOCASCIO: There are. And with the exception of the ones we agree on, Passage 13, for instance, is this one.

This is what that exhibit looked like.

I'm sure it was one they said, wow, I don't know what this is all about. But hopefully it made it a little easier.

This takes each of the various columns and

lines that they say provides some structure, and it gives it a number. And we then walked through these numbers to say why none of them satisfy the requirements of 1126.

And it really boils down to four categories, all of which the Federal Circuit has said don't cut it. One, if you just describe the function but not providing an algorithm; so you say one could design a function to do that. Well, that's very interesting, but it certainly doesn't satisfy 1126.

The second is attempting to incorporate, as Mr. Giza just did with the Frahm article. Incorporating their reference something else. Well, that's not sufficient under 1126.

The third is a person of skill in the art could figure it out. And that is clearly not the law. And we'll get to that -- the point I raised earlier, the Biomedino case, saying that just because telling someone known techniques or methods can be used, that's not satisfactory for 1126. It doesn't provide any algorithm.

And the last is it needs to actually be linked to the function. You can't just flow around the spec and find something that seems like it's an algorithm and say, oops, there you go. I got something.

The Federal Circuit's rejected each of these, Passages 3 all the way to 12, and that's a whole section of the spec that the plaintiffs point to fails to disclose sufficient structure.

And I'm going to walk through those now because Mr. Giza covered a handful of them just now.

First, where the specification merely describes claimed functions but does not explain how the patent performs that function, that's not enough.

And one of the sections, Mr. Giza just put on the screen, Passage 9 as we've called -- that's the upper right here on Slide 113, is Column 22, lines 18 to 25.

And now I've put it on the screen, line 18 through 25. Okay. And we just saw this a second ago. Mr. Giza suggested this is an algorithm. This tells you what to do.

It says the system can be programed to implement the projection by referring to known characteristics of the structure. That's the -- the question we're asking is how do you do it?

You can program it to do a lot of things. That's not an algorithm. Indeed, it says an expert system, expert in quotes, is able to predict the occurrence of certain branches and mergers in this

structure. This is about as far as you can get from an algorithm you can use with a computer to generate those branches and mergers. Indeed, it's so hard to do that they called it an expert system, but never disclosed anywhere in the specification how to do it.

Just telling someone it can be done is not an algorithm. It certainly is not enough under 1126 to identify sufficient structure clearly linked to perform a function. And that defect goes at Passages 6, 9, 10 and 11 that are pointed to by the plaintiffs.

Blackboard versus Desire2Learn hits this right on the head. The language simply describes the function to be performed. It says nothing about how the access control manager ensures that those functions are performed; as such, the language describes an outcome, not a means for achieving that outcome.

Simply reciting software without some detail about the meanings is not enough, and so those passages do not come close to providing any structure, Your Honor.

They also point to other people's work. Passage 4 points to Basser as identifying some algorithm. Passages 7 and 8, and one of which the Frahm reference was the one Mr. Giza just talked to you, that's 8, that's the right side.

Identifying a prior art reference has been held insufficient to incorporate the algorithms from those references into the corresponding structure. Otherwise, you would use means language, and then you would cite every piece of art that existed out there, and then the person who wants to know if they're infringing has to go look at all those works, divine the algorithms they used, and those are now all part of your claim. That's not the way it works under 1126. Passages 4, 7 and 8 fail for this reason.

This was also addressed squarely by the Federal Circuit in Pressure Products. Courts cannot look to the prior art identified by nothing more than a title and a citation to provide the corresponding structure for means-plus-function. Simply mentioning the prior art reference does not suffice as a specific enough description to give the patentee a claim to all those structures disclosed in that reference.

Now, in response to this clear law, plaintiffs point to a case called Atmel. And they say, well, Atmel says you can incorporate by reference and that somehow negates Pressure Products and ignores this problem.

Well, Atmel actually found that in a very unique circumstance that title, the actual title of the

reference, was a sufficient disclosure, and so thus by citing that reference, you've disclosed enough.

Pressure Products actually addresses that issue. It says -- talks about Atmel. Says it's unique. And then it says that argument is rejected in Pressure Products, and it ought to be rejected here because if on the other hand the title did not disclose the prior art structure, the structures in the prior art reference could not be corresponding structure.

So the point is these processing claims require an actual algorithm, Your Honor. The title of any those three works does not provide the algorithm to generate 3-D data or anything else that these functions require.

Their third argument -- and this is Passages 5 and 12. Just saying someone knows you can do it. And this was -- Mr. Giza put up Passage 12, at the bottom. He said, well, we tell people that in some applications of known anisotropy subtraction is unnecessary and can be foregone in favor of a threshold analysis.

That's not an algorithm by any means. And what it's saying, which is someone of skill in the art might know or someone of skill in the art could figure it out, the Federal Circuits rejected that under 1126. And if you didn't means claiming, Your Honor, and didn't

resort to functional claiming, you could point things out and spec that way all you want. But if you're going to use means-plus-function language, you have to under 1126 disclose the structure.

That is not sufficient to disclose the structure. The Federal Circuit has said that repeatedly.

Med Instrumentation vs. Selecta, the correct inquiry is to look at the disclosure of the patent, not simply whether one of skill in the art would have been able to write a software program. And that's what they're saying. They're saying you could write an algorithm to generate using the software, thresholding or any of these other points. Simply because someone of skill in the art would be able to devise a means to perform the function is not sufficient.

Lastly, they point to passages that don't link to claim function, where the disclosure and the specification is not an algorithm for performing that function.

That same case, Med Instrumentation, talks about what we've talked about for the last half hour here, which is the duty of a patentee to clearly link or associate structure with the claim function is the quid pro quo for allowing the patentee to claim it in a

functional way under 1126.

And they use Passage 3 for that point. Passage 3 does not describe a way of vector processing; it merely describes how the output of vector processing could be clinically useful. And that's what Passage 3 does.

Passage 8 fails for the same reason. That's the Frahm reference. It fails both because you can't incorporate by reference. But it also fails because it's actually not linked to this function because it's saying it's possible to carry out the signal acquisition using a 3-D image sequence. It's not generating 3-D images. It's not processing them as the claims require. It just happens to be talking about a 3-D dataset, Your Honor.

And so coming back now with that to Claims 54 and 64, we talked about 54 as requiring boxes 112 through 152, with respect specifically to 152, because that seems to be where Mr. Giza and I disagree -- oh, sorry, Your Honor. Were you -- did I --

THE COURT: No.

MR. LOCASCIO: Okay. If I can get us back to 106 right quick.

Box 152, described in the specification, is discrimination of water diffusion anisotropy is then

achieved by subtracting. And so Claim 54, which requires generating data representative of anisotropic diffusion, requires you to do 150 and 152. Once you've done that -- and 152 is part of Claim 154, Your Honor -- it can't also become part of Claim 64, because performing a step once in Claim 54 and then performing it again in Claim 64 cannot support a different function as Claim 64 requires.

And so with that, I'll pass it back to Mr. Giza, because as I see it, Claim 54 we've covered. Claim 64 is only the part agreed to, because Passages 3, 4, 5, 6, 7, 8 and 12, which are the ones NeuroGrafix points, to fail for the four reasons that we looked at, Your Honor. They either try to incorporate it by reference, just say you can figure it out if you're one of skill in the art; talk about the function or the goal, which is you can do this, or we would like to do this, or aren't linked to the structure.

THE COURT: Please.

MR. GIZA: Just one point in rebuttal to opposing counsel's argument. He correctly states that Atmel looked at the title of an article and finds that that is sufficient for structure for a means-plus-function limitation. What he does is misstates NeuroGrafix's argument regarding Atmel.

We are not taking the position that we can incorporate by reference information that will add to the corresponding structure to the algorithms that support the means-plus-function limitations. That's very clear.

However, we do argue, just as was found appropriate in Atmel, that in certain situations the title of references that are described in the specification provide the algorithm, the corresponding structure that's clearly linked to the claim language.

THE COURT: Now, let me ask you a question. I know this sounds -- I have been following everything you have said, but the last thing you said I'm not so sure about. Tell me that point again.

MR. GIZA: Yes, Your Honor.

Federal Circuit law is clear that when you have a means-plus-function claim limitation there must be some corresponding structure disclosed in the specification, and equally that you cannot find that corresponding structure in a document that's incorporated by reference.

THE COURT: That's right.

MR. GIZA: Atmel stands for the proposition that if you have in your disclosure, in your specification, the title of an article and the title

itself provides the information that one of ordinary skill in the art would understand to disclose appropriate structure for a means-plus-function limitation, that can be sufficient.

THE COURT: I understand now.

MR. GIZA: Okay. So with that, let's move on to Claim 55.

This is Slide 74 -- oh, I'm sorry. 72.

The disputed limitation with Claim 55 is limitation C, and it has two relevant parts. It is again processing means 4 and little (i)(1), vector processing said outputs to generate data representative of anisotropy diffusion exhibited by the selected structure in the region regardless of the alignment of said diffusion-weighted gradients with respect to the orientation of said selected structure.

And little (i)(2) little (i), processing said data representative of anisotropy diffusion to generate a dataset describing the shape and position of said selected structure in the region, said dataset distinguishing said selected structure from other structures in the region that do not exhibit diffusion anisotropy.

So it's easier to break this down into the two separate (i) and little (2)(i).

For Claim 55-CI, that's the vector processing portion of this claim. The parties agree that appropriate corresponding structure, an algorithm for vector processing, is disclosed in Column 20, lines 36 through 21, lines 23.

In particular, defendants are agreeing that equations 3 through 6 in the specification are an appropriate algorithm linked -- clearly linked to the vector processing.

Here is Column 20 in the specification. And I want to point out some relevant steps in the algorithm that both sides agree is disclosed here.

First, at line 35, it says that image information is collected from, for example, four multislice sets using a zero diffusion gradient B zero and diffusion gradient B(sub xy), B(sub yz) and B -- oh, I'm sorry. Those are commas. B(sub x), B(sub y) and B(sub z) in the x, y and z respectively.

So there's an initial collection or there are signal intensities obtained at that point.

Further down in this section it indicates that the signal intensity is included in equation 3 to normalize the resulting imagine intensity. So there's a normalization step here.

Third, there's a use of an effective

gradient or an effective vector. The direction of the effective gradient associated with this pixel image includes components beta (xy), beta (xz) and beta (yz) computed in the following manner. And we have some equations, equations 4, 5 and 6. And these include some trigonometric function, further processing.

So those are at least four steps that you can take away from the specification where both parties agree this is corresponding structure, this is appropriate algorithm for Claim 55-C1.

If we look at Slide 75, this is a graphic that NeuroGrafix put together with the assistance of one of ordinary skill in the art, Dr. Filler, and we broke up the specification into the various steps. And this is just a way of visualizing the text.

When we look at a flow chart, we naturally connect that with an algorithm in software terms. So that's all we've done here. We've taken some relevant portions of the spec and we said, look, these are the steps they're calling out. There are other steps in addition. But this is at least one way one of ordinary skill in the art would look at that disclosure.

And again, everything on the left-hand side of this slide, the parties agree that's appropriate corresponding structure that's clearly linked to Claim

55-CI.

On the right-hand side is the disputed portion. So this is the portion, Column 21, lines 35 through 47. And what's disclosed there -- and I think we hit upon it earlier with regard to the vector processing limitation in the claims where it's not a means-plus-function limitation. And the question is, is there an algorithm there.

Of course there is. As you can see -- and we've done the same thing as we did with the language that the parties agreed was an algorithm. We simply broke it down into the steps, and we found three relevant steps. Although you could certainly break it down different ways.

First, there's using the diffusion gradient info to calculate diagonal and off-diagonal components. And that's coming from the language, the title diagonal and off-diagonal components of the self-diffusion tensor, a tensor, as counsel from both sides I think have indicated is a form of matrix math. It's a form of vector processing. But it's a higher order calculation. It's three axes or more. It's the same fundamental math.

The second step in this tensor algorithm is to use the matrix, use the tensor to calculate MR

diffusion anisotropy data to calculate an effective vector. That also comes from the language diagonal and off-diagonal components of the self-diffusion tensor because it would indicate to one of ordinary skill in the art the use of matrix math, the use of tensor math.

And the third step is transform the coordinates to get the orientation of the neural fibers. That's the last portion. It's in the specification at Column 21, lines 43 to 45, where it describes transforming the coordinates of the MR diffusional anisotropy data.

So here we have a tensor algorithm just like the agreed-upon algorithm that is part of the corresponding structure for vector processing. It's clear that this is also clearly linked with vector processing.

I'll show you the portion of the specification that we've been talking about.

This is Column 21, lines 35 through 47, and you can see the first sentence here: Alternative forms of vector analysis can also be applied.

So this whole paragraph talks about other forms of vector analysis that are part of the vector processing means-plus-function limitation here.

If there are no questions on that

limitation, I will move on to 55-C2(i).

THE COURT: No.

MR. GIZA: Let's go to Slide 76.

Just to focus us, we're looking at the second portion of Claim 55. It's processing said data representative anisotropy diffusion to generate a dataset describing the shape and position of said selected structure in the region, the dataset distinguishing said selected structure from other structures in the region that do not exhibit diffusion anisotropy.

So again, this goes back to diffusion anisotropy, which Your Honor will remember is the property of different tissues to diffuse water in a certain direction as opposed to equally in all directions. And this is processing to distinguish tissue that has diffusion anisotropy --

THE COURT: What is the difference here?

MR. GIZA: So, Your Honor, the defendants argue that there is no appropriate corresponding structure for Claim 55-C2(i). And we have found appropriate algorithm corresponding structure for processing the data representative of anisotropic diffusion to generate a dataset describing the shape and position of the selected structure and the rest of this

claim language.

Now, Your Honor, you will probably recall that this language is very familiar. This is quite similar to the language that is in Claim 64. And as you might expect, the same portion of the specification support and describe corresponding structure algorithms for Claim 55-C2(1).

Let's go to Slide 77.

So there are four portions of the specification that disclose algorithms supporting Claim 55-C2(i). The first one is the connected voxel with thresholding algorithm. That's at Column 21, lines 55 through 59.

And if you will indulge me, I'll just put that up quickly.

So at line 55, it reads: For example, the location of the nerves in a given image plane can be detected by comparing pixel intensity to some threshold level.

So there's an algorithm that describes two steps: Comparing the pixel intensity to a dependent threshold; and then immediately following that is the language a three-dimensional image can then be formed by linking or projecting the results of these two-dimensional analyses over a desired volume.

So again, the first step is comparing pixel intensity to a threshold. And the second step is linking and projecting these results of the two-dimensional analysis to form a three-dimensional image.

As we discussed for Claim 64, that's clearly linked to the language in Claim 55-C2(i) to generate a dataset describing the shape and position of said selected structure. The shape and position, for example, of a nerve.

Second point, maximum anisotropy connection algorithm. This is immediately following in the specification, Column 21, line 60 through Column 22, line 5.

Again, we have what can be described as least a two-step algorithm. First, identifying the direction of maximum anisotropy for each pixel and then using known voxel connection routines such as Saloner. And this can be used to generate an image.

It's expressly described as an alternative to the language immediately above the connected voxel with thresholding algorithm. So it is clearly linked to the same Claim 55-C(2) language generating a dataset describing the shape and position.

The third bullet point here, three-

dimensional imaging technique. Again, we've discussed this in the context of Claim 64, Column 22, line 6 through 17. It involves using the 3-D imaging sequences, performing a 3-D Fourier analysis, and then using the algorithm in Figures 9 and 10. Again, this is described expressly as an alternative to the previous two. It is expressly clearly linked.

The last bullet point on Slide 77, you can supplement the above algorithm with the known path of the structure. Again, this is clearly linked with Claim 55-C2 because it's described as a supplement to the algorithms that we just described above.

THE COURT: Give him a chance.

MR. GIZA: Okay.

MR. LOCASCIO: Your Honor, with respect to 55-C1, the plaintiffs contend that it's not only the actual formula -- just step back a second. Let's take -- we spent a lot time on a lot of these passages.

But every single one of these is presented in means-plus-function claim for processer or processing means, which we all agree when the structure disclosed is just a computer -- which is what is disclosed here. And we need an algorithm that would be used by one to program said computer to perform that function.

So while there's a lot of talk about

algorithms and one line in a specification, the algorithm disclosed must be capable then being programmed as the software to a computer to perform a function. These complex neural tracing 3-D imagery, it -- one line in a spec, just as sort of stepping back and say, okay, this is all interesting. But one line in a spec saying you can do this is nowhere near, to be perfectly blunt, the kind of algorithmic disclosure of any of the art -- I'm talking about any of the cases that have found sufficient structure for a computer means.

THE COURT: Whose algorithm can it be?

MR. LOCASCIO: Well, it doesn't -- I don't believe it has to be -- if the only point of novelty was that, it would have to be the applicant, for sure. If it's performing a function or some -- if the algorithm to perform the function is not the point of novelty but its claim to means language, it doesn't need to be novel for the applicant. But it certainly needs to be disclosed.

THE COURT: I agree about that. Now, that is from what I have derived from this case.

MR. LOCASCIO: And so, for instance, if they took the formulas from Basser, if that was sufficient to be an algorithm, it was actually in that underlying

reference, and in the specification they said we're going to use the description -- whether they called it Basser's or didn't give him credit or not, but then they walked through a 20-line section using formulas and ways to do it or had a flow chart, that could be enough to be an algorithm.

But just pointing to Basser or point to Frahm is not. And Atmel, plaintiffs say, no, no, we're only saying Atmel is the title that self-discloses this. And then we went through 55-C1.

And what Mr. Giza said is they created this handy chart -- this was, I think, Exhibit 3 or D to their -- the plaintiffs' reply brief.

No? I have it wrong?

Pardon me. Opening brief.

And the left side, Your Honor, it certainly looks a lot like these are -- these aren't that different from this great chart.

The left side is four boxes long. And they say that's the algorithm we all agree on. So how on earth could the defendants dispute that the right side isn't also an algorithm. It's three boxes. It's almost as many boxes as the left.

The algorithm we agreed on, equations 3 through 6, is in the specification. And what they have

boiled down to the four boxes on the left looks like this in the actual specification.

It starts here. It has formulas. And then it keeps on trucking on to Column 21, all the way to there.

And so when they disclose that level of detail as to how to do it with mathematical formulas, we said, okay, there's your algorithm. And that is supposedly depicted in summary fashion over here on the left. And they say, well, the right side is also an algorithm disclosed fully in the specification.

Well, that let's look at the specification they point to for those three boxes.

Under Atmel, it is the title, and the title alone, of the Basser reference. Diagonal and off-diagonal components of the self-diffusion tensor, colon, their relation to an estimation from the NMR spin-echo signal. That's it.

That's the title. And their contention is that is an adequate disclosure of an algorithm you could program your computer to do to generate this work. And then they depict it by taking that, whatever, 15 words of text and turn it into this flow chart and say, well, it's a flow chart now, so it's an algorithm.

It's not, Your Honor. 55-C1 is not

describing sufficient structure of the Basser reference by the title they have on the screen in this specification, Your Honor. To suggest that, it does not only turn Atmel on its head, but to throw away all of the cases under 1126. At this point now, we're incorporating by reference, and that's the end of the analysis. That's what they're doing here.

55-C2, the plaintiffs point to four passages. The defendants' contention, Your Honor -- can you just type 127 on here. It's Slide 127.

55-C2 is an extension of 55-C1, obviously. So it can't use the same structure to perform a separate function. And they point us to four passages and say that's sufficient structure to have an algorithm to generate this processing and generate a dataset describing the shape and position.

And 6, 7, 8 and 9, two of those are depicted on Slide 116, Your Honor. Slide 116, Passage 7, they point to is incorporating Saloner by reference. Passage 8 is incorporating Frahm by reference. Neither of those provide sufficient structure to actually prepare and generate the software to do that.

The other two passages, 6 and 9, are on the left side, which this is the classic it-can-be-done disclosure: A 3-D image can then be formed by linking

or projecting the results of these two-dimensional analyses over the desired volume. That's it.

They contend that is a sufficient algorithm to program a computer to generate a 3-D image.

Interestingly, the other one is the expert system we talked about before. I don't need to rehash that for the Court. That's all they identify for C2.

The fact of why there's no algorithm in here to do that, Your Honor, is because they haven't figured it out and they hadn't done it yet. And Dr. Siruta said as much. In his deposition, he said they hadn't developed software for actually doing this. And that hadn't happened not only in 1992, it hadn't happened when he left the company in 2004.

When asked if there's any software algorithms necessary -- that are necessary on the scanner to generate these images, he said there is software necessary, but his group had not come up with it. And neither had Dr. Filler or anybody else that was part of the team at that time.

So it's not surprising that there's no actual algorithms disclosed in the spec to do these things, because they had not been done. And to now point to other references, Your Honor, and suggest that that's sufficient structure violates the Federal

Circuit's guidance about not incorporating by reference as well as not relying on just what one of skill in the art could figure out. Because at base, these are all computer-based processing means which, as Your Honor recognized, there's a significant body of case law requiring something much more than the plaintiffs point to here.

As a result, 55-C2 doesn't disclose any algorithm in the specification to support that function, and as a result it's indefinite.

THE COURT: All right.

MR. LOCASCIO: Thank you.

MR. GIZA: Let me make just two quick points in rebuttal to what opposing counsel has just argued.

First, he flashed up a couple of the portions that I discussed earlier and said, look, there's a title of an article in this portion of the specification, so that can't be sufficient disclosure.

Well, Your Honor, as we went through those various portions, I pointed out the language in the specification in that title, all around that title itself, that described how Dr. Filler and the other inventors anticipated using the disclosure of that article as part of their invention.

The title of that article alone gives

sufficient indication to one of ordinary skill in the art as to what sort of algorithm is appropriate to implement these claims.

The second point, opposing counsel's argument appears to come down to the point that he doesn't think that the disclosure in the specification is sufficient.

He says, Look, it's only five lines or it's only a paragraph. Here's one where it's two paragraphs or three paragraphs, and that's sufficient.

Well, as we discussed before we started going into the means-plus-function claim, the sufficiency of the disclosed structure and its clear link to the recited function is judged through the lens of what a person of ordinary skill in the art would have. And in this case -- in this case it's a high level.

THE COURT: All right. Now you can go on to other claims, or you can go on to your contention about step-plus-function. And then we'll adjourn.

You can answer to what he says.

MR. LOCASCIO: Thank you, Your Honor.

MR. GIZA: If I could just go on to Claims 58 and 61 briefly. Those are the last two means-plus-function claims. We can handle those

together relatively quickly, I believe.

THE COURT: You've got to do that.

MR. GIZA: We're looking at Slide 78. We've put up the language of Claims 58 and 61. It's very similar. It has a rather lengthy preamble. And then the operative claim language is analyzing the data representative of --

THE COURT: That's right.

MR. GIZA: -- anisotropic diffusion to determine how to relate this dataset, and said additional data sets describing the shape and position of cross-section of said neural tissue.

And based upon the results of said analyzing the data representative of anisotropy diffusion that first step, combining said dataset, and said additional data sets to generate said further data sets that describes the three-dimensional shape and position of the segment of said neural tissue, thereby allowing a three-dimensional shape and position of curved neural tissue to be described.

And this is essentially the same language in both of these claims.

THE COURT: It is.

MR. GIZA: NeuroGrafix contends that there is ample supporting structure for this. It includes of

course, as we have including throughout, computer 72, front end circuit 74, postprocessing system 32 and equivalents.

In addition, algorithms supporting this can be found at Columns 21, lines 55 through 59; Column 21, line 16 through 23; Column 19, 33 through 38, Column 21, line 60 through Column 22, line 5, and those equivalents.

Let's look quickly at Slide 80.

THE COURT: I have it in front of me.

MR. GIZA: Okay. I'll walk you through the various algorithms that are disclosed supporting Claims 58 and 61.

First, there's a simple projection algorithm. That's at Column 19, lines 33 through 38.

The first step would be to identify the --

THE COURT: I have it here, and I can refer to it.

MR. GIZA: Pardon me, Your Honor?

THE COURT: I have your reference right in front of me.

MR. GIZA: Okay.

So in Column 19, line 33, it talks about the simple form of a three-dimensional image generation. So we know right off the bat that we're talking about

three-dimensional image generation. That's right out of the claim language where we're generating a three-dimensional image of the shape and position of the neural tract.

It describes the high signal-to-noise ratio, S/N ratio of the two-dimension neurograms produced by system 14. Readily allows the image nerve cross-sections to be identified and then linked together to form three-dimensional projection of a neural structure.

So again, we have a two-step algorithm here. We have identification of the nerve. And then we have linking of the nerve cross-sections. And this is all expressly linked to the recited function, the three-dimensional image generation.

The next portion is the connected voxel with thresholding algorithm, Column 21 through lines 55 through 59. We have already talked about this in context with the other claims that have this very similar claim language of shape and position of a nerve. I won't go through that again.

We also have on Slide 81, we have an orientation contrast algorithm. This is at Column 21, line 16 through 23, where we use arc 10 images. It describes these as being alternatives to the other disclosed algorithms.

Then we assign an intensity of the pixel in direct proportion to the angular output.

And the third step is we are able to trace the neural tract. This is all at Column 21, line 16 through 23.

And finally we have --

THE COURT: Let me stop you. You have this down here.

MR. GIZA: Yes, Your Honor.

THE COURT: I understand the point.

MR. GIZA: Okay.

THE COURT: Do you want to say anything?

MR. LOCASCIO: All I need to say, Your Honor, is we don't believe that any of these -- these are the same four passages we've looked at before.

THE COURT: Yes.

MR. LOCASCIO: We call them 6, 7, 10 and 11.

THE COURT: Yes.

MR. LOCASCIO: And 6 and 7 they say are also part of the independent claim that these are penned from. So you would be using the same structure to perform two different functions, which I don't believe you can do. Certainly it doesn't do it here.

One of them, 7, is incorporating Saloner by reference. The other three just say it can be done.

And we don't believe that's sufficient structure for an algorithm.

Thank you.

THE COURT: Now, let's go on to step-plus-function.

MR. GIZA: Yes, Your Honor.

THE COURT: What is the point here that you want to make?

MR. GIZA: So with regard to claim --

THE COURT: It is not a means-plus-function.

MR. GIZA: It's not a step-plus-function, Your Honor. Yes, that's correct.

THE COURT: No, it should not be construed as a means-plus-function claim.

MR. GIZA: That's right, Your Honor. It should not be construed under Section 112, paragraph 6. In this particular instance, they are -- it's a method claim. So it would be a step-plus-function format. And defendants are arguing that the step-plus-function analysis should be applied. We're arguing that it should not.

So looking at Slide 82, the analysis goes as follows. First, there's no steps for language. The Federal Circuit in Masco was very clear. The steps for language is required for the presumption of applying,

Section 112, paragraph 6. There's no presumption for alternative language like steps of.

The Federal Circuit said, well, that form has been used, you know, through, you know, for decades, and so we don't want to change patentee's expectation on a subtle wording choice. They have to say steps 4 to invoke 1126 to invoke the presumption.

And the next bullet point, Masco says where the claim drafter has not signalled his intent to invoke Section 112, paragraph 6 by using the steps 4 language, we are unwilling to resort to that provision to constrain the scope of coverage of a claim limitation without a showing that the limitation contains nothing that can be construed as an act.

THE COURT: We are going to let him answer that because I already read your points.

MR. GIZA: Okay.

THE COURT: And then we are going to conclude. You know this argument.

MR. LOCASCIO: I know this argument, Your Honor. The defendants do not contend that we are entitled -- that there is a presumption, Your Honor, a step-plus-function, just like means-plus-function.

The language itself gets you a presumption which is rebuttable, but it also is -- can be

demonstrated, and some claims indeed are step-plus-function, if that phrase is not used.

In the analysis, Masco Corp., the gear system's case we cite, point to if it is a method claim with a step and a function, but it doesn't actually tell you what acts to perform to perform the function, well, then it's no different than -- well, then it's just considered under 1126 in the method context.

And here, these claims are. This is Claim 36 on the screen.

Now, remember, Claim 55 talks about a process or a process or means. This is the step of processing said data representative anisotropic diffusion. The function is to generate a dataset describing the shape and position.

THE COURT: That is what the function is.

MR. LOCASCIO: And that is exactly the same function, not surprisingly, as it was is back in Claim 55. And I'm not suggesting, Your Honor, that there's presumption that if you have it both as an apparatus and as a method that you automatically turn all those methods into step-plus-function.

But what I am saying is when you have language like this that doesn't tell you any act to perform in the claim to do it. Okay. What do I do to

process that to generate that dataset?

It doesn't say anything. There's no act at all. And where there is no act, doesn't tell you how to do it, well, then we're back in the 1126 analysis. And that is the case for Claim 36. As a result for this instance, it's also the claim for 39, 46 and 49. It's also the case for those three claims.

In those claims it is the function -- or the step is to generate by analyzing and then the -- you know, how do you do that analysis. It's the same issue.

And for all of these, Your Honor, a claim cannot be construed so broadly as to cover every way to do it in a method claim either, just like in an apparatus claim.

And so here we're faced with having not identified any way or how to do it. No acts. It's 1126 that applies. And I grant you, the number of step-plus-function cases is a lot smaller than the number of means-plus-function cases. But that doesn't mean when you're faced with claim language like this, we ignore it and we just run away from 1126. This is exactly the kind of case that 1126 step-plus-function is designed to address. And where there is no structure, Your Honor, having failed to identify any algorithm that does this, all of these, Your Honor, are indefinite:

36, 36E, 39, 46 and 49.

THE COURT: Yes.

MR. LOCASCIO: And so I think that's about as short as I can make that point, Your Honor.

THE COURT: All right. Now let me ask you, we're going to conclude it this way. You heard me answer to the point of novelty. What in your opinion is the point of novelty here?

MR. LOCASCIO: For the entirety of the invention, Your Honor?

The vector processing equations that are defined -- I think equations 3, 4, 5 and 6?

THE COURT: Yes.

MR. LOCASCIO: I don't know that those are in the art. I don't know that we've identified that. They're certainly described as the patentees' as their own lexicographer as to what vector processing is.

THE COURT: Yes.

MR. LOCASCIO: To the extent there are method claims that are means-plus-function processing means that are narrowly construed -- because that's the only algorithm disclosed, that aspect, Your Honor, seems to my account to be the only point of novelty. The apparatus claims, okay, that -- pardon me. Do I -- I may have it backwards.

The earlier claims basically saying get a conspicuous nerve, I think there's zero point of novelty, Your Honor, at base. Use the MRI machine. Generate an image using existing prior art pulse sequences to get an image that has a nerve that is some way determined to be conspicuous when that existed in the art, I don't think there's any point of novelty for that. The only thing that I'm not aware of being clearly not a point of novelty is the vector processing math.

If I'm missing something, I'm sure someone will --

THE COURT: The vector processing interested me very much. Now, let's go back to what you said referencing the patentee. Tell me again. I asked this question before and I don't want to leave it, because I want to know what is the point of novelty?

MR. FENSTER: Your Honor --

THE COURT: Yes.

MR. FENSTER: -- you need to look claim by claim. One of the points of novelty --

THE COURT: Now, let me ask you --

MR. FENSTER: Yes.

THE COURT: -- is that the position, I need to look claim by claim? Because I thought when I came

CERTIFICATE OF REPORTER.

COUNTY OF LOS ANGELES)
) SS.
STATE OF CALIFORNIA)

I, SHERI S. KLEEGER, OFFICIAL COURT REPORTER, IN AND FOR THE UNITED STATES DISTRICT COURT FOR THE CENTRAL DISTRICT OF CALIFORNIA, DO HEREBY CERTIFY THAT PURSUANT TO SECTION 753, TITLE 28, UNITED STATES CODE, THE FOREGOING IS A TRUE AND CORRECT TRANSCRIPT OF THE STENOGRAPHICALLY REPORTED PROCEEDINGS HELD IN THE ABOVE-ENTITLED MATTER AND THAT THE TRANSCRIPT PAGE FORMAT IS IN CONFORMANCE WITH THE REGULATIONS OF THE JUDICIAL CONFERENCE OF THE UNITED STATES.

DATE: APRIL 4, 2011

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SHERI S. KLEEGER, CSR
FEDERAL OFFICIAL COURT REPORTER